CITY OF REDMOND
Commercial/Multi-Family Submittal Checklist

The following minimum information is required for your Commercial/Multi-Family Building Permit Application. Mark each box to designate that the information has been provided. Please submit this checklist as part of your submittal documents. **Incomplete applications will not be accepted.**

1) ❒ **One (1) City of Redmond Commercial/Multi-Family Permit Application**
(One permit application per building or structure is required.)

2) ❒ **One (1) City of Redmond Commercial/Multi-Family Submittal Requirements Form**

3) ❒ **One (1) Building Code Summary Worksheet (IBC)**

4) ❒ **One (1) Building Permit Fee Calculation Worksheet**

5) ❒ **Two (2) Site Plans**

6) ❒ **Two (2) Architectural Drawings**

7) ❒ **Two (2) Structural Drawings**

8) ❒ **Two (2) Structural Calculations**

9) ❒ **Three (3) Geotechnical Engineering Reports if the Project has Received Site Plan Approval or One (1) Geotechnical Engineering Report If the Project has NOT Received Site Plan Approval**

10) ❒ **Eight (8) Civil Drawings if the Project has Received Site Plan Approval**

11) ❒ **Two (2) Drainage Calculations if the Project has Received Site Plan Approval**

12) ❒ **Three (3) Landscape Drawings if the Project has Received Site Plan Approval**

13) ❒ **Two (2) Project Specification Manuals (if applicable)**

14) ❒ **Two (2) Washington State Energy Code Compliance Forms**

15) ❒ **Two (2) Special Inspection Requirements Forms**

16) ❒ **Two (2) Occupant's Statement of Intended Use Form**

17) ❒ **Two (2) 8 ½ x 11 Site Plan, Elevation Plan and Floor Plan per the Fire Dept. Program**

18) ❒ **One (1) copy of Project Approval Letter from the City of Redmond Technical Committee**

19) ❒ **One (1) copy of Civil Plan Submittal Requirements form in place of items 10, 11 and 12 If the Project has NOT Received Site Plan Approval**

Drawings shall be BOUND SEPARATELY BY TYPE, architectural, structural and landscape, and then ROLLED TOGETHER IN COMPLETE SETS.

An intake appointment is required for all new Commercial or Multi-Family Building Permit Applications. To schedule an appointment please contact the City of Redmond Permit Center at 425-556-2473 or by e-mail to permittech@redmond.gov.

I acknowledge that all items designated above are included as part of this application.

Applicant's Signature _____ Date _____

CITY OF REDMOND
Civil Plan Submittal Requirements

Permit Number: _____ **Date:** _____

Project Name: _____

Project Number: _____

The Building Permit Application for this project has been accepted ***without*** an approved Site Plan Entitlement letter and ***without*** Civil Drawings. Once the City of Redmond Technical Advisory Committee has issued an approved Site Plan Entitlement letter, it is the responsibility of the applicant to submit the following to the Redmond Public Works Department:

- Eight (8) copies of the Civil Drawings that have addressed all comments in the Site Plan Entitlement letter.
- Two (2) copies of the Geotechnical Engineering Report (Soils Report).
- Two (2) copies of the Drainage Calculations.
- Three (3) copies of the Landscape Drawings.

This information shall be delivered directly to John Wellman, City Hall, 15670 N.E. 85th Street, Second Floor, 425-556-2740, ***along with a copy of the Site Plan Entitlement letter and a signed copy of this form***.

Thank you for your cooperation.

_____
Applicant's Signature

_____
Printed Name

_____
Date

THE CITY OF REDMOND
Commercial/Multi-Family Submittal Requirements

A. FEES DUE AT TIME OF PERMIT APPLICATION

The following non-refundable fees will be collected at the time of application for all commercial/multi-family projects. Please refer to the sheet, Commercial/Multi-Family Building Permit Fees for additional information.

1. Building Plan Check Fee
2. Energy Code Plan Check Fee
3. Fire Department Plan Check Fee
4. Engineering Plan Check Fee
5. 3% Technology Surcharge Based on Total Permit Cost

B. CODES

The City of Redmond currently enforces the following:

National Codes

1. 2003 International Building Code (IBC)
2. 2003 International Residential Code (IRC)
3. 2003 International Mechanical Code (IMC)
4. 2003 International Fuel Gas Code (IFGC)
5. 2003 International Fire Code (IFC)
6. 2003 Uniform Plumbing Code (UPC)
7. 2003 International Property Maintenance Code (IPMC)
8. 2002 National Electric Code (NEC)
9. 1998 Accessible & Usable Buildings & Facilities (ICC/ANSI 117.1)

Washington State Amendments

1. WAC 51-50 Washington State Building Code (IBC)
2. WAC 51-51 Washington State Building Code (IRC)
3. WAC 51-52 Washington State Mechanical Code (IMC)
4. WAC 51-54 Washington State Fire Code (IFC)
5. WAC 51-56 & 51-57 Washington State Plumbing Code & Standards (UPC)
6. WAC 51-11 Washington State Energy Code (WSEC)
7. WAC 51-13 Washington State Ventilation and Indoor Air Quality Code (WSVIAQ)
8. WAC 296-46B Electrical Safety Standards, Administration, and Installation

Redmond Local Amendments and Regulations

1. Redmond Municipal Code Title 15 Buildings and Construction
   - Chapter 15.06 - Fire Code
   - Chapter 15.08 - Building Code
   - Chapter 15.10 - Property Maintenance Code
   - Chapter 15.12 - Electrical Code
   - Chapter 15.14 - Mechanical Code
   - Chapter 15.16 - Plumbing Code
   - Chapter 15.18 - Energy Code
   - Chapter 15.20 - Ventilation and Indoor Air Quality Code
2. Redmond Community Development Guide
3. Redmond Fire Department Standards

C. CITY OF REDMOND DESIGN REQUIREMENTS

Design Wind Speed:	85 mph (IBC Figure 1609)
Ground Snow Load:	15 psf (IBC Figure 1608.2)
Rain on Snow Surcharge:	5 psf added to flat roofs if slope is <1/2" (IBC 1608.3.4 & ASCE 7-02 Sec.7-10)
Seismic Zone:	This is site specific for buildings designed under the IBC (IBC 1615 & 1616)
Rainfall:	2 inches/hour for roof drainage design
Frost Line Depth:	12 inches
Soil Baring Capacity:	1,500 psf unless a Geo-Technical report is provided (IBC Table 1804.2)

D. PLANS AND DRAWINGS

Submit two (2) complete sets of drawings and plans. Drawings and plans must be submitted on minimum 18"x24", or maximum 30"x42" paper. All sheets are to be the same size and sequentially labeled. Plans are required to be clearly legible, with scaled dimensions, in indelible ink, blue line, or other professional media. Plans will not be accepted that are marked preliminary or not for construction, that have red lines, cut and paste details or those that have been altered after the design professional has signed the plans.

Please Note: A separate submittal of plans is required for each building or structure.

E. BUILDING CODE SUMMARY WORKSHEET

Submit one (1) completed **Building Code Summary Worksheet**.

F. SPECIAL INSPECTION PROGRAM

Where special inspection is required by IBC 1704, the registered design professional in responsible charge shall prepare a special inspection program that will be submitted to the City of Redmond and approved prior to issuance of the building permit to comply with IBC 106.1. A copy of the **Special Inspection Requirement** form must be submitted.

G. WASHINGTON STATE ENERGY CODE

For Commercial projects submit two (2) completed 2003 Washington State Non-Residential Energy Code **Envelope Summary** forms.

For Multifamily projects submit two (2) completed copies of the **2003 WSEC & VIAQ Residential Prescriptive Compliance** forms.

H. OCCUPANT'S STATEMENT OF INTENDED USE

The **Occupant's Statement of Intended Use** form shall be completely filled out and may require the submittal of a Hazardous Materials Inventory Statement (HMIS). Contact the Redmond Fire Prevention Bureau for additional information.

I. DEFERRED SUBMITTALS

Deferred submittals are not allowed unless approved by the Building Official as outlined in IBC Section 106.3.4.2. All deferred submittals that are approved by the Building Official must be indicated on the approved plans with the specified time in which they are to be submitted for review. An additional plan review fee will be required for deferred submittals.

J. BUILDING PERMIT FEE CALCULATION WORKSHEET

Submit one (1) completed **Building Permit Fee Calculation Worksheet**.

DETAILED SUBMITTAL REQUIREMENTS

A. SITE PLAN

1. Drawing shall be prepared at a scale not to exceed 1"=20 feet.
2. Show building outline and all exterior improvements.
3. Provide property legal description and show property lines.
4. Provide dimensions from the property lines to a minimum of two building corners (or two identifiable locations for irregular plan shapes).
5. Show building set backs, easements and street access locations.
6. Indicate north direction.
7. Indicate finish floor elevation for the first level.
8. Provide a topographical map of the existing grades and the proposed finished grades with maximum five feet elevation contour lines.
9. Show the location of all existing and proposed underground utilities, including water, sewer, gas and electrical.
10. Show locations of all existing trees. Indicate which trees are to be saved as part of the development.
11. Established street grades, proposed finished grades and as applicable; flood hazard areas, floodways, and design flood elevations.

B. ARCHITECTURAL DRAWINGS

1. **Cover Sheet**

   a) Site Information:

      1) Location
      2) Zoning
      3) Total site area (square feet)
      4) Lot coverage (square feet and percentage).
      5) Location of building(s) on the site with dimensions to property lines.
      6) Assumed property lines for multiple buildings on the same property.
      7) Entire site must show barrier free accessibility.
      8) Parking with barrier free stalls indicated.
      9) Finish grade elevations (topographical at 5-foot intervals).

   b) Building Information:

      1) Specify model code information.
      2) Construction type.
      3) Number of stories and total height in feet.
      4) Building square footage (per floor and total).
      5) IBC Occupancy Type (show all types by floor and total)
      6) List work to be performed under this permit.

   c) Design Team Information:

      1) Design Professional in Responsible Charge
      2) Architect(s)
      3) Structural Engineer(s)
      4) Civil Engineer(s)
      5) Landscape Architect(s)
      6) Owner(s)
      7) Developer(s)

2. **Code Summary Floor Plan Sheet(s):**

   a) Provide the information specified in the **Building Code Summary Worksheet**.
   b) Designate these sheets as **CS**.

3. **Floor Plan Sheet(s):**

a) Plan view 1/8-inch minimum scale - Details a minimum of 1/4-inch scale.
b) Specify the use of each room/area.
c) Show **ALL** exits on the plans; include new, existing or eliminated.
d) Show all Barrier-Free information on the drawings.
e) Show the location of all permanent rooms, walls and shafts.
f) Provide door and door hardware schedules.
g) Provide elevator location when building has greater than 3,000 square feet of area on the second level or three or more stories.
h) Specify each wall type, door type, and glazing requirements.
i) Provide details and assembly numbers for any fire resistive assemblies.
j) Indicate on the plans all rated walls, doors, windows and penetrations.

4. **Reflected Ceiling Plan Sheet(s):**

a) Plan view 1/8-inch minimum scale - Details a minimum of 1/4-inch scale.
b) Provide ceiling construction details.
c) Provide suspended ceiling details complying with IBC 803.9.1.1, if applicable. Show seismic bracing details.
d) Show the location of all emergency lighting and exit signage.
e) Detail the seismic bracing of the fixtures.
f) Include a lighting fixture schedule.

5. **Framing Plan Sheet(s):**

a) Specify the size, spacing, span and wood species or metal gauge for all stud walls.
b) Indicate all wall, beam and floor connections.
c) Detail the seismic bracing for all walls.
d) Include a stair section showing rise, run, landings, headroom, handrail and guardrail dimensions, if applicable.

6. **Elevation Plan Sheet(s):**

a) Provide building heights (floor and roof elevations).
b) Show the grade elevations.
c) Provide a view of all sides.
d) Show all approved exterior design requirements.
e) Exterior stairways, decks, and railings.

7. **Detail Sheet(s):**

a) Details a minimum of 1/4-inch scale.
b) Wall and ceiling constructions, include assembly numbers for rated construction.
c) All connections.
d) Door, door hardware and window schedules.
e) Fire protection details, i.e. penetrations.

8. **Roof Plan Sheet(s):**

a) Roof drainage - **Note: Overflow drains shall be two inches above the roof drain or roof elevation at the drain.**
b) Overflow drains are required to be terminated in an obvious day-lighted location near an entry.
c) Rooftop equipment is required to be screened per Section 20D.120.20-010 of the Redmond Community Development Guide.
d) All rooftop equipment must be reviewed by the structural engineer of record for supporting of such equipment.

C. STRUCTURAL DRAWINGS

Submit structural drawings for all structural assemblies required for the building. A registered engineer in the State of Washington shall prepare all structural drawings. All drawings prepared or reviewed by the engineer must be signed and sealed.

1. **General Structural Information:**

    a) Design criteria used for foundation, floors, roof and lateral designs - Include geotechnical criteria used in design.

2. **Structural Sheet(s):**

    a) Provide foundation, floor and roof framing plans as is applicable.
    b) Illustrate size and location of all structural elements including, but not limited to, footings, columns, beams, girders, joists, shear walls, bracing and floor and roof diaphragms. Details of structural assemblies must be referenced with the place using standard symbols.
    c) Structural details and schedules shall be provided as required to provide specific information of the structural assemblies and must match requirements provided in the structural calculations.

D. STRUCTURAL CALCULATIONS

Structural calculations must be submitted for all commercial buildings. A cover sheet must be provided that is signed and sealed by the engineer of record, who is registered in the State of Washington. Calculations should include a table of contents with each page numbered. Calculations prepared by a computer program must include an explanation of the program and documentation for input and output data formats.

E. GEOTECHNICAL ENGINEERING REPORTS

The geotechnical engineering report must include the minimum information as outlined in Section 1804 of the Uniform Building Code. This includes, but shall not be limited to:

1. Potential for liquefaction and soil strength loss during earthquakes.
2. Recommendations for foundation type and design criteria which includes allowable soil bearing pressure, expected total and differential settlements, design passive and active soil pressures, design coefficient to resist sliding.
3. Recommendations for site preparation.

F. CIVIL DRAWINGS

For specific requirements pertaining to the civil plans, please consult the following departments:

Public Works Engineering Division:	(425) 556-2740
Public Works Utilities Division:	(425) 556-2840
Fire Department:	(425) 556-2246

G. DRAINAGE CALCULATIONS

For specific requirements pertaining to the drainage calculations, please consult the Public Works Engineering Division at (425) 556-2740.

H. LANDSCAPE PLANS

For specific requirements pertaining to the landscape plans, consult the Development Review Planner assigned to this project.

The Building Permit does not include any mechanical, electrical, plumbing, or fire sprinkler/alarm work. **These permits are issued separately.** Mechanical, electrical, plumbing, or fire sprinkler/alarm permits require a separate permit application and may also require a separate plan review.

Please note that any new or altered space that involves food handling or preparation requires King County Health Department approval **before the permit can be issued**. You must provide the Permit Center a copy of the approval letter or the approved plans. Contact the King County Health Department at 206-296-9741 with any questions or for more information.

An intake appointment is required for all new Commercial or Multi-Family Building Permit Applications. To schedule an appointment or to ensure that you have the most current information, please contact the City of Redmond Permit Center at 425-556-2473 or by e-mail to permittech@ci.redmond.gov

Visit our website at http://www.redmond.gov/insidecityhall/planning/planning.asp.

Applications delivered by courier or mail will not be accepted.

Incomplete applications will not be accepted.

I acknowledge that all items designated as submittal requirements must accompany my Building Permit Application to be considered a complete submittal.

Signature: _____ Date: _____
(Owner/Owner's Representative)

Company Name: _____ Phone #: _____

THE CITY OF REDMOND
Building Code Summary Worksheet

FOR COMMERCIAL AND MULTIFAMILY NEW CONSTRUCTION OR PROJECTS THAT INCREASE SQUARE FOOTAGE

This form details the minimum information we need in order to review your project for compliance with the building codes. To begin your review, we require that this worksheet be completed and turned in with your Building Permit application.

You are required to include the necessary full sized sheet(s) with the drawing set, detailing the information. The code summary is required to be an integral part of the drawings, and these code summary pages shall be designated as CS (Code Summary) sheets.

BUILDING CODE EDITION:_____

SECTION 1 – BUILDING USE OR OCCUPANCY

Identify all use and occupancy classification group(s) in the Building *(i.e. B, M, R-2, A-3, etc.):*						

List all occupancy separation fire barrier ratings required *(i.e. B to S-2 = 2hr)*, IBC 302.3.2 Include both horizontal and vertical separations Or Building is constructed per IBC 302.3.1 for Non-Separated Uses (Circle if using this provision)	to	=	hr(s)
	to	=	hr(s)
	to	=	hr(s)
	to	=	hr(s)
	to	=	hr(s)

SECTION 2 – BUILDING CONSTRUCTION

List Construction Type(s) used in the design *(IA, IIIB, VA, etc.)*:					
				Allowed	**Proposed**
Building Height (per IBC Table 503)					
Number of Stories (per IBC Table 503)					
Are Automatic Sprinklers used for Height Modifications? (per IBC Section 504)			**YES**	**NO**	
Is there a basement?	**YES**	**NO**	If YES, List square footage of basement:		

Is an Automatic Sprinkler System Used in Place of 1-Hour Construction? (per IBC Table 601, footnote d.)	**YES**	**NO**

Fire Resistance of Exterior Walls Based on Fire Separation Distance (per IBC Table 602)		**Rating**	**Opening Protection**
List Wall and Fire Separation Distance: **1.**			
2.			
3.			
4.			
Fire Resistance Rating Requirements (per IBC Table 601)	**Rating Req'd**	**Rating Provided**	**Assembly #**
Structural Frame			
Bearing Walls - Exterior			
Bearing Walls - Interior			
Nonbearing Walls & Partitions - Exterior			
Nonbearing Walls & Partitions - Interior			
Floor Construction			
Roof Construction			

SECTION 3 – BUILDING AREA LIMITATIONS: "ALLOWABLE" AND "ACTUAL"

If there are multiple construction types, or if a fire wall divides the building, **provide a separate analysis for each area.** Repeat as necessary.

Area Limitations for Each Proposed IBC Use or Occupancy Group	**Occupancy 1**	**Occupancy 2** (as applicable)	**Occupancy 3** (as applicable)
IBC Use or Occupancy Group			
Table 503 Area Limitation (per IBC Table 503)			
Frontage Area Increase Multiplier (per IBC 506.2)			
Automatic Sprinkler System Area Increase Multiplier (per IBC 506.3)			
Total ALLOWABLE Floor Area (Equation 5-1 / IBC 506.1)			
Total ALLOWABLE Building Area (per IBC 506.4)			
Does the Building Qualify for Unlimited Area (per IBC 507)		**YES**	**NO**

PROPOSED Area of the Building Per Floor	**UBC Occupancy 1**	**UBC Occupancy 2** (as applicable)*	**UBC Occupancy 3** (as applicable)*
IBC Occupancy Type			
First Floor			
Mezzanine			
Second Floor			
Third Floor			
Other Floor(s)			
Total Area Per Occupancy			
TOTAL BUILDING AREA			

*If there is more than one occupancy group in the building, provide a "Sum of the Ratios" calculation (per IBC 302.3.2) to show that the proposed building is not over area.

"Sum of the Ratios" Calculation (if applicable)

SECTION 4 – OCCUPANT LOAD AND BUILDING EXITING

If there are multiple IBC Occupancy types on any floor or in the building, provide a separate analysis for each occupancy type. Repeat as necessary.

	Basement	**First Floor**	**Mezzanine**	**Second Floor**	**Third Floor**	**Other Floor(s)**
TOTAL Occupant Load						

Number of Exits and Exit Width from Each Level (as applicable)**:**	**Number of Exits**		**Exit Width**			
			Stairs		**Other Egress Components**	
	Required	**Provided**	**Required**	**Provided**	**Required**	**Provided**
Basement						
First Floor						
Mezzanine						
Second Floor						
Other Floor(s)						
Are Areas of Refuge Required?				**YES**		**NO**

SECTION 5 – PLUMBING FIXTURE COUNT
(WAC 51-50 – IBC Chapter 29 - Washington State Amendments)

Occupancy[1] & Area Served	Plumbing Occupant Load Factor	Plumbing Occupant Load[2]	Water Closets Required vs. Provided				Lavatories Required vs. Provided			
			Male		Female		Male		Female	
Total Number of Fixtures		**Required**								
		Provided								
		Accessible								
Unisex Toilet (per IBC 1109.2.1)			**Required**							
			Provided							
Number of Drinking Fountains			**Required**							
			Provided							
			Accessible							

[1]Occupancy is determined based on 2003 International Building Code WAC 51-50 Section 2902.1

[2]Equally divide the plumbing occupant load between male and female for determining the number of required plumbing fixtures.

SECTION 6 – CODE SUMMARY FLOOR PLAN(S)

Provide a basic floor plan for each level, showing partitions, stairs, doors with door swings, relites, fixtures, etc. Minimum scale is 1/8" = 1' – 0"

Drawing Sheets shall be designated as **CS** (Code Summary)

1) Clearly label the following:
   a) Use of each room or area (i.e. office, sales, conference, kitchen, manufacturing, etc.)
   b) IBC Occupancy classification for each room or area and floor.
   c) Floor area of each room or area.
   d) Occupant load factor used for each room or area and floor.
   e) Occupant load of each room or area and floor.
2) Provide a total occupant load summary by floor or level.
3) Clearly show all actual and assumed property lines, including those required by IBC 704.3.
4) Graphically show the extent and rating of any fire walls, include the rating of any required opening protection.
5) Graphically show the extent and rating of any fire barriers, include the rating of any required opening protection.
6) Graphically show the extent and rating of any Areas of Refuge along with an outline of the wheelchair spaces showing that they are outside the required exit path width.
7) Graphically show the extent and rating of any other rated assemblies, such as corridors, exit passageways, stair enclosures and shaft enclosures, include the rating of any required opening protection.
8) Clearly show a complete Means of Egress Path, including the width and all required exits.
9) Indicate any doors that are provided with panic hardware and/or magnetic hold-opens.

THE CITY OF REDMOND
Special Inspection Requirements

In accordance to Section 1701 and State amended Section 1702 of the current adopted Uniform Building Code, the ***owner***, the ***engineer of record***, or ***architect of record*** acting as the owner's agent, is required to hire an independent testing/inspection agency to perform required special inspections.

The independent agency hired to perform the duties of special inspection is required to be a registered agency with Washington Association of Building Officials (WABO), under the Special Inspection Registration Program (SIRP) Standard No. 306.

The testing agency shall complete the attached forms and submit them to the Building Division prior to issuance of the building permit. For projects requiring continuous inspection, the agency shall submit the name and qualifications of the individual(s) assigned to the project. The inspectors assigned to any project within the City shall be currently registered with W.A.B.O., and certified for the disciplines assigned.

A. Contractor's Responsibilities

1. Notify the agency

The contractor is responsible for notifying the inspection agency in sufficient time for scheduling personnel to perform required inspections.

2. Provide access to City of Redmond approved plans

The approved City plans shall be readily accessible at the job site.

3. Retaining special inspection reports at the job site

The contractor is also responsible for retaining at the job site all special inspection records submitted by the special inspector, and providing these records for review by the Building Department's inspector upon request.

B. Duties of the Special Inspector

1. Observe work

The inspector shall observe the work for compliance with the City approved (stamped) plans, specifications, and applicable provisions of the UBC. The architect/engineer's reviewed shop drawings, and/or placement drawings, may be used only as an aid to inspections.

Continuous Special Inspection - Means the same inspector is on site day to day observing the work requiring special inspections. Sometime referred to as the Resident Inspector, etc.

Periodic Special Inspection - Some inspections may be made on a periodic basis to satisfy the requirements of continuous inspection, provided these periodic scheduled inspections are performed as outlined in the project plans and specifications, and approved by the Building Official.

2. Report non-conforming items

The inspector shall bring non-conforming items to the immediate attention of the contractor, and note all such items in the daily report. If any item is not resolved in a timely manner and is about to be incorporated in the work, the special inspector shall immediately notify the Building Department, the engineer or architect, his/her office, and post a discrepancy notice.

3. Furnish daily reports

The special inspector shall complete and sign a daily report for each day's inspections. The daily reports shall remain at the job site with the contractor for the Building Department's inspector. The reports shall include the following:

a. Description of the inspections, with locations and tests performed.
b. Listing any non-conforming items.
c. Include how items were resolved or unresolved.
d. List any changes or corrections to non-conforming issues authorized by the engineer, architect, or City building inspectors.

4. Furnish weekly reports

The inspection agency shall furnish weekly reports of the tests and inspections performed directly to the Building Department, project engineer, architect, and/or others as designated.

5. Furnish final report

The inspection agency shall submit a final signed report to the Building Department stating that all items requiring special inspections and testing were fulfilled, all discrepancies were corrected or resolved, and all work requiring special inspections is in conformance with the approved design drawings and specifications.

Include any items unresolved or discrepancies in coverage (i.e., missed inspections, periodic inspections when continuous was required, etc.) shall be specifically itemized in this report.

C. City's Responsibilities

1. To verify compliance

The City is required to oversee the implementation of UBC Section 1701, 1702 and the WABO - SIRP Standards 306.

2. Approve special inspections

The Building Department shall approve all special inspectors and special inspection requirements.

3. Monitor special inspections

Work requiring special inspections, and the performance of special inspectors, shall be monitored by the Building Department's inspector. The cities approval must be obtained prior to placement of concrete or other similar activities in addition to that of the special inspector.

4. Issue Certificate of Occupancy

The Building Department will only issue a Certificate of Occupancy after all special inspection reports and the final report, have been submitted and accepted.

D. Owner Responsibilities

The owner, the engineer, or architect of record acting as the owner's agent, shall fund special inspection services. The owner is responsible for seeing that these requirements are met.

E. Engineer or Architect of Record Responsibilities

The engineer, or architect of record, shall include special inspection requirements and specifications on the plans. Provide structural observation Per Section 1702 as ammended by the Wash. State.

ACKNOWLEDGMENTS

I have read and agree to comply with the terms and conditions of this agreement.

Owner/ Agent:_____ **By:**_____ **Date:**_____

Contractor:_____ **By:**_____ **Date:**_____

Inspection Agency:_____ **By:**_____ **Date:**_____

Project Engineer/ Architect of Record:_____ **By:**_____ **Date:**_____

Return this original agreement along with the attached form to:

Building Division
City of Redmond Permit Center
15670 NE 85th Street
P.O. Box 97010
Redmond, Washington, 98073-9710

THE CITY OF REDMOND
Special Inspection Agency
Information Form

PROJECT _____ PERMIT # _____

ADDRESS _____ DATE _____

TESTING AGENCY _____ PHONE # _____

ADDRESS _____ CITY _____ ZIP _____

ASSIGNED INSPECTOR _____

ENGINEER OF RECORD _____ COMPANY _____

ADDRESS _____ CITY _____ ZIP _____

Check Required Special Inspections per Uniform Building Code, Section 1701:

(Indicate continuous (C) or periodic (P) special inspection requirement in categories below)

___ 1. Reinforced concrete - concrete over 2500 psi

___ 2. Bolts installed in concrete

___ 3. Special moment-resisting concrete frame

___ 4. Reinforcing steel and prestressing tendons

___ 5. Structural welding

___ 6. High strength bolting

___ 7. Structural masonry

___ 8. Reinforced gypsum concrete

___ 9. Insulating concrete fill

___ 10. Spray-applied fire-resistive materials

___ 11. Piling, drilled piers , and caissons

___ 12. Shotcrete

___ 13. Special grading, excavation, and filling

___ 14. Smoke-control system

___ 15a. Expansion and Adhesive Anchors

___ 15b. Soil nailing, concrete tiebacks

___ 15c. Other inspections as required by the Engineer or the Building Official.

_____

CITY OF REDMOND 2003 Washington State Energy Code

Envelope Summary — Climate Zone 1 — ENV-SUM

2003 Washington State Energy Code Compliance Forms Revised June 2002 KJM

Project Info	Project Address	Date
		For Building Department Use
	Applicant Name:	
	Applicant Address:	
	Applicant Phone:	

Project Description	☐ New Building ☐ Addition ☐ Alteration ☐ Change of Use

Compliance Option	☐ Prescriptive ☐ Component Performance (See Decision Flowchart (over) for qualifications) ☐ ENVSTD 2.1 (4.0 not acceptable) ☐ Systems Analysis

Space Heat Type	◯ Electric resistance ◯ All other (see over for definitions)
Glazing Area Calculation Note: Below grade walls may be included in the Gross Exterior Wall Area if they are insulated to the level required for opaque walls.	Total Glazing Area (rough opening) (vertical & overhd) divided by Gross Exterior Wall Area times 100 equals **% Glazing** Electronic version: these values are automatically taken from ENV-UA-1. , X 100 =
Concrete/Masonry Option	◯ yes ◯ no Check here if using this option and if project meets all requirements for the Concrete/Masonry Option. See Decision Flowchart (over) for qualifications. Enter requirements for each qualifying assembly below.

Envelope Requirements (enter values as applicable)	
Fully heated/cooled space	
	Minimum Insulation R-values
Roofs Over Attic	
All Other Roofs	
Opaque Walls[1]	
Below Grade Walls	
Floors Over Unconditioned Space	
Slabs-on-Grade	
Radiant Floors	
	Maximum U-factors
Opaque Doors	
Vertical Glazing	
Overhead Glazing	
	Maximum SHGC (or SC)
Vertical/Overhead Glazing	

Semi-heated space[2]	
	Minimum Insulation R-values
Roofs Over Semi-Heated Spaces[2]	

1. Assemblies with metal framing must comply with overall U-factors
2. Refer to Section 1310 for qualifications and requirements

Opaque Concrete/Masonry Wall Requirements	
Insulation on interior - maximum U-factor is 0.19	
Insulation on exterior or integral - maximum U-factor is 0.25	
If project qualifies for Concrete/Masonry Option, list walls with HC ≥ 9.0 Btu/ft²•°F below (other walls must meet Opaque Wall requirements). Use descriptions and values from Table 20-5b in the Code.	
Wall Description (including insulation R-value & position)	**U-factor**

Notes:

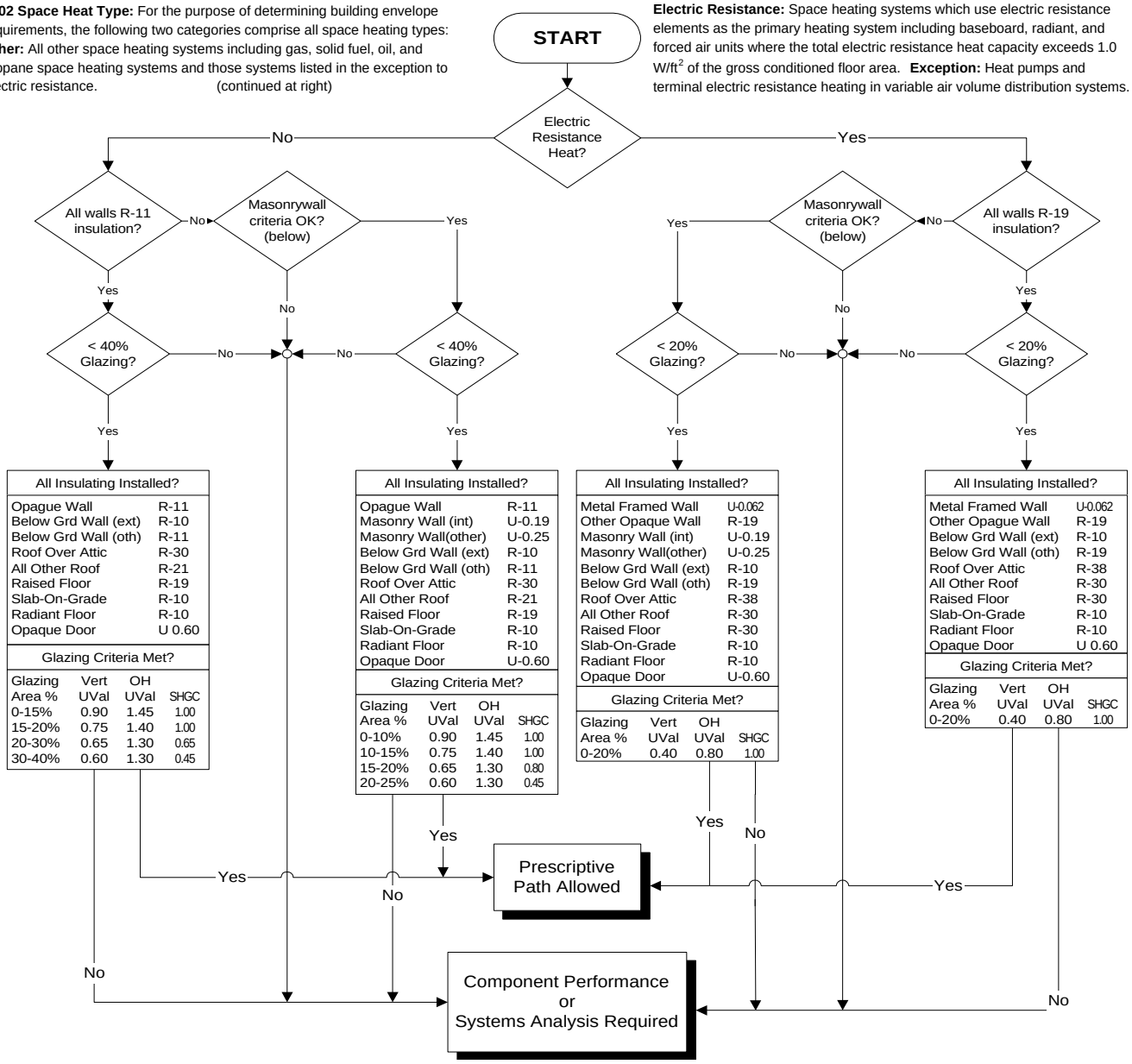
Envelope Summary (back) Climate Zone 1 ENV-SUM

Decision Flowchart
for Prescriptive Option

Use this flowchart to determine if project qualifies for the optional Prescriptive Option. If not, either the Component Performance or Systems Analysis Options must be used.

1302 Space Heat Type: For the purpose of determining building envelope requirements, the following two categories comprise all space heating types: **Other:** All other space heating systems including gas, solid fuel, oil, and propane space heating systems and those systems listed in the exception to electric resistance. (continued at right)

Electric Resistance: Space heating systems which use electric resistance elements as the primary heating system including baseboard, radiant, and forced air units where the total electric resistance heat capacity exceeds 1.0 W/ft^2 of the gross conditioned floor area. **Exception:** Heat pumps and terminal electric resistance heating in variable air volume distribution systems.



Concrete/Masonry Option*	Wall Heat Capacity (HC)			
Assembly Description	Assy.Tag	HC**	Area (sf)	HC x Area
		Totals		
		Area weighted HC: divide total of (HC x area) by Total Area		

*If the area weighted heat capacity (HC) of the total above grade wall is a minimum of 9.0, the Concrete Masonry Option may be used.
**For framed walls, assume HC=1.0 unless calculations are provided; for all other walls, use Section 1009.

CITY OF REDMOND 2003 Washington State Energy Code

Envelope UA Calculations Climate Zone1 ENV-UA

2003 Washington State Energy Code Compliance Forms Revised June 2002 KJM

Project Address		Date
Space Heat Type	◯ Electric resistance ◯ All other	For Building Department Use
Glazing Area as % gross exterior wall area	Prop. / Max.Target	
Concrete/Masonry Option	◯ Yes ◯ No	

Notes: If glazing area exceeds maximum allowed in Table, then calculate adjusted areas on back (over). If Concrete/Masonry Option is used, Target U-factors, SHGC and Glazing % will be different than shown below. Refer to Table 13-1 for correct values.

	Building Component List components by assembly ID & page #	Proposed UA U-factor x Area (A) = UA (U x A)	Target UA U-factor x Area (A) = UA (U x A)
Vertical Glazing	U= Plan ID: U= Plan ID: U= Plan ID: U= Plan ID: U= Plan ID: U= Plan ID:		Glazing % / Electric Resist. / Other Heating 0-15% 0.40 0.90 >15-20% 0.40 0.75 >20-30% see note above 0.60 >30-40% see note above 0.50 (see Table 13-1 for Conc/Masonry values)
Overhead Glazing: Over Attics	U= Plan ID: U= Plan ID: U= Plan ID: U= Plan ID:		Glazing % / Electric Resist. / Other Heating 0-15% 0.80 1.45 >15-20% 0.80 1.40 >20-30% see note above 1.30 >30-40% see note above 1.25 (see Table 13-1 for Conc/Masonry values)
Overhead Glazing: Oth.Roofs	U= Plan ID: U= Plan ID: U= Plan ID: U= Plan ID:		
Opaque Doors	U= Plan ID: U= Plan ID: U= Plan ID:		Electric Resist. / Other Heating 0.60 0.60
Roofs Over Attics	R= Plan ID: R= Plan ID: R= Plan ID:		Electric Resist. / Other Heating 0.031 0.036
Other Roofs	R= Plan ID: R= Plan ID: R= Plan ID:		Electric Resist. / Other Heating 0.034 0.050
Opaque Walls*	R= Plan ID: R= Plan ID: R= Plan ID: R= Plan ID: R= Plan ID: R= Plan ID: R= Plan ID: **Note: sum of Target Areas here should equal Target Opaque Wall Area (see back)		** ** ** Electric Resist. / Other Heating Ordinary 0.062 0.14 Conc(int) 0.19 0.19 Conc(oth) 0.25 0.25
Below Grade Walls	R= Plan ID: R= Plan ID: R= Plan ID: Note: if insulated to levels required for opaque walls, list above with opaque walls		Electric Resist. / Other Heating 0.062 0.14
Floors Over Uncond. Sp	R= Plan ID: R= Plan ID: R= Plan ID: R= Plan ID:		Electric Resist. / Other Heating 0.029 0.056
Slab-on-grade Radiant	R= Plan ID: R= Plan ID: R= Plan ID: R= Plan ID:		Electric Resist. / Other Heating F=0.54 F=0.54 (see Table 13-1 for radiant floor values)
	Totals		**Totals**

*For CMU walls, indicate core insulation material.

For compliance:

1) Proposed Total Area shall equal Target Total Area, and 2) Proposed Total UA shall not exceed Target Total UA.

Climate Zone 1 ENV-SHGC

	Glazing List components by assembly ID & page #	Proposed SHGC SHGC*	x Area (A)	= SHGC x A	Target SHGC SHGC	x Area (A)	= SHGC x A
Glazing	ID:						
	ID:				Glazing %	Electric Resist.	Other Heating
	ID:				0-20%	1.00	1.00
	ID:				>20-30%	not allowed	0.65
	ID:				>30-40%	not allowed	0.45
	ID:				(see Table 13-1 for Conc/Masonry values)		
	Totals				**Totals**		

*Note: Manufacturer's SC may be used in lieu of SHGC.

For compliance: Proposed total SHGC x A shall not exceed Target total SHGC x A

NOTE: Since 1997 SHGC compliance for vertical and overhead glazing is allowed to be calculated together.

Target Area Adjustment Calculations

If the total amount of glazing area as a % of gross exterior wall area (calculated on ENV-SUM1) exceeds the maximum allowed in Table 13-1, then this calculation must be submitted Use the resulting areas in the Target UA and SHGC calculations above.

Proposed Areas: Numbered values are used in calculations below.

	Roofs over Attics	Other Roofs	Walls
Glazing Area	OG=	OG=	VG=
Opaque Area			

Note:
OG = overhead glazing
VG = vertical glazing

Gross Exterior Wall Area ( ) x Max Glazing Area (Table 13-1) ( ) ÷ 100 = Maximum Target Glazing Area ( )

( ) – Target OG Area in Roofs over Attics ( ) ⇳ lesser = Max OG Remaining ( ) – Target OG Area in Other Roofs ( ) ⇳ lesser = Target VG Area ( )

For Target OG's, the lesser values are used both here and below.

	Proposed Opaque Area		Proposed OG Area		Target OG Area		Target Opaque Area
Roofs over Attics		+		–		=	
Other Roofs		+		–		=	

	Proposed Opaque Area		Proposed VG Area		Target VG Area		Target Opaque Area
Walls		+		–		=	

Target Areas OK

Note: If there is more than one type of wall, the Target VG Area may be distributed among them, and separate Target Opaque Areas found.
If the Target Areas for Opaque Walls listed on the front must equal the total calculated here.

Target values in shaded boxes are used in the applicable Target UA calculations on the front.
Target VG Area and Total Target OG Area are also used in the applicable Target SHGC calculations above.

Building Permit Plans Checklist ENV-CHK

2003 Washington State Energy Code Compliance Forms Revised June 2002 KJM

Project Address	Date

The following information is necessary to check a building permit application for compliance with the building envelope requirements in the Washington State Nonresidential Energy Code.

Applicability (yes, no, n.a.)	Code Section	Component	Information Required	Location on Plans	Building Department Notes
GENERAL REQUIREMENTS (Sections 1301-1314)					
	1301	Scope	Unconditioned spaces identified on plans if allowed		
	1302	Space heat type:	If "Other", indicate on plans that electric resistance heat is not allowed		
	1310.2	Semi-heated spaces	Semi-heated spaces identified on plans if allowed		
	1311	Insulation			
	1311.1	Insul. installation	Indicate densities and clearances		
	1311.2	Roof /ceiling insul.	Indicate R-value on roof sections for attics and other roofs; Indicate clearances for attic insulation; Indicate baffles if eave vents installed; Indicate face stapling of faced batts		
	1311.3	Wall insulation	Indicate R-value on wall sections; Indicate face stapling of faced batts; Indicate above grade exterior insulation is protected; Indicate loose-fill core insulation for masonry walls as necess; Indicate heat capacity of masonry walls if masonry option is used or if credit taken in ENVSTD;		
	1311.4	Floor insulation	Indicate R-value on floor sections; Indicate substantial contact with surface; Indicate supports not more than 24" o.c.; Indicate that insulation does not block airflow through foundation vents		
	1311.5	Slab-on-grade floor	Indicate R-value on wall section or foundation detail; Indicate slab insulation extends down vertically 24" from top; Indicate above grade exterior insulation is protected		
	1311.6	Radiant floor	Indicate R-value on wall section or foundation detail; Indicate slab insulation extends down vertically 36" from the top; Indicate above grade exterior insulation is protected; Indicate insulation also under entire slab where req'd. by Official		
	1312	Glazing and doors	Provide calculation of glazing area (including both vertical vertical and overhead) as percent of gross wall area		
	1312.1	U-factors	Indicate glazing and door U-factors on glazing and door schedule (provide area-weighted calculations as necessary); Indicate if values are NFRC or default, if values are default then specify frame type, glazing layers, gapwidth, low-e coatings, gas fillings		
	1312.2	SHGC & SC	Indicate glazing solar heat gain coefficient or shading coefficient on glazing schedule (provide area-weighted calculations as necessary)		
	1313	Moisture control			
	1313.1	Vapor retarders	Indicate vapor retarders on warm side		
	1313.2	Roof/ceiling vap.ret.	Indicate vapor retarder on roof section; Indicate vap. retard. with sealed seams for non-wood struc.		
	1313.3	Wall vapor retarder	Indicate vapor retarder on wall section		
	1313.4	Floor vapor retarder	Indicate vapor retarder on floor section		
	1313.5	Crawl space vap. ret.	Indicate six mil black polyethylene overlapped 12" on ground		
	1314	Air leakage			
	1314.1	Bldg. envel. sealing	Indicate sealing, caulking, gasketing, and weatherstripping		
	1314.2	Glazing/door sealing	Indicate weatherstripping		
	1314.3	Assemb. as ducts	Indicate sealing, caulking and gasketing		
PRESCRIPTIVE/COMPONENT PERFORMANCE (Sections 1320-23 or 1330-34)					
		Envelope Sum. Form	Completed and attached. Provide component performance worksheet if necessary Provide ENVSTD 2.1 screen 1 output if necessary		

If "no" is shown for any question, provide explanation:

Envelope - General Requirements

1311 Insulation

1311.1 Installation Requirements: All insulation materials shall be installed according to the manufacturer's instructions to achieve proper densities, maintain clearances, and maintain uniform R-values. To the maximum extent possible, insulation shall extend over the full component area to the intended R-value.

1311.2 Roof/Ceiling Insulation: Open-blown or poured loose-fill insulation may be used in attic spaces where the slope of the ceiling is not more than 3/12 and there is at least thirty inches of clear distance from the top of the bottom chord of the truss or ceiling joist to the underside of the sheathing at the roof ridge. When eave vents are installed, baffling of the vent openings shall be provided so as to deflect the incoming air above the surface of the insulation.

Where lighting fixtures are recessed into a suspended or exposed grid ceiling, the roof/ceiling assembly shall be insulated in a location other than directly on the suspended ceiling.

> **Exception:** Type IC rated recessed lighting fixtures.

Where installed in wood framing, faced batt insulation shall be face stapled.

1311.3 Wall Insulation: Exterior wall cavities isolated during framing shall be fully insulated to the levels of the surrounding walls. When installed in wood framing, faced batt insulation shall be face stapled.

Above grade exterior insulation shall be protected.

1311.4 Floor Insulation: Floor insulation shall be installed in a permanent manner in substantial contact with the surface being insulated. Insulation supports shall be installed so spacing is not more than twenty-four inches on center. Installed insulation shall not block the airflow through foundation vents.

1311.5 Slab-On-Grade Floor: Slab-on-grade insulation installed inside the foundation wall shall extend downward from the top of the slab a minimum distance of twenty-four inches or to the top of the footing, whichever is less. Insulation installed outside the foundation shall extend downward a minimum of twenty-four inches or to the frostline, whichever is greater. Above grade insulation shall be protected.

> **Exception:** For monolithic slabs, the insulation shall extend downward from the top of the slab to the bottom of the footing.

1311.6 Radiant Floors (on or below grade): Slab-on-grade insulation shall extend downward from the top of the slab a minimum distance of thirty-six inches or downward to the top of the footing and horizontal for an aggregate of not less than thirty-six inches.

If required by the building official where soil conditions warrant such insulation, the entire area of a radiant floor shall be thermally isolated from the soil. Where a soil gas control system is provided below the radiant floor, which results in increased convective flow below the radiant floor, the radiant floor shall be thermally isolated from the sub-floor gravel layer.

1312 Glazing and Doors

1312.1 Standard Procedure for Determination of Glazing and Door U-Factors: U-factors for glazing and doors shall be determined, certified and labeled in accordance with Standard RS-31 by a certified independent agency licensed by the National Fenestration Rating Council (NFRC). Compliance shall be based on the Residential or the Nonresidential Model Size.

Product samples used for U-factor determinations shall be production line units or representative of units as purchased by the consumer or contractor. Unlabeled glazing and doors shall be assigned the default U-factor in Section 2006.

1312.2 Solar Heat Gain Coefficient and Shading Coefficient: Solar Heat Gain Coefficient (SHGC), shall be determined, certified and labeled in accordance with the National Fenestration Rating Council (NFRC) Standard by a certified, independent agency, licensed by the NFRC.

> **Exception:** Shading coefficients (SC) shall be an acceptable alternate for compliance with solar heat gain coefficient requirements. Shading coefficients for glazing shall be taken from Chapter 27 of Standard RS-27 or from the manufacturer's test data.

1313 Moisture Control

1313.1 Vapor Retarders: Vapor retarders shall be installed on the warm side (in winter) of insulation as required by this section.

> **Exception:** Vapor retarder installed with not more than 1/3 of the nominal R-value between it and the conditioned space.

1313.2 Roof/Ceiling Assemblies: Roof/ceiling assemblies where the ventilation space above the insulation is less than an average of twelve inches shall be provided with a vapor retarder. Roof/ceiling assemblies without a vented airspace, where neither the roof deck nor the roof structure are made of wood, shall provide a continuous vapor retarder with taped seams.

> **Exception:** Vapor retarders need not be provided where all of the insulation is installed between the roof membrane and the structural roof deck.

1313.3 Walls: Walls separating conditioned space from unconditioned space shall be provided with a vapor retarder.

1313.4 Floors: Floors separating conditioned space from unconditioned space shall be provided with a vapor retarder.

1313.5 Crawl Spaces: A ground cover of six mil (0.006 inch thick) black polyethylene or approved equal shall be laid over the ground within crawl spaces. The ground cover shall be overlapped twelve inches minimum at the joints and shall extend to the foundation wall.

> **Exception:** The ground cover may be omitted in crawl spaces if the crawl space has a concrete slab floor with a minimum thickness of three and one-half inches.

1314 Air Leakage

1314.1 Building Envelope: The requirements of this section shall apply to building elements separating conditioned from unconditioned spaces. Exterior joints around windows and door frames, openings between walls and foundation, between walls and roof and wall panels; openings at penetrations of utility services through walls, floors, and roofs; and all other openings in the building envelope shall be sealed, caulked, gasketed, or weatherstripped to limit air leakage.

1314.2 Glazing and Doors: Doors and operable glazing separating conditioned from unconditioned space shall be weatherstripped. Fixed windows shall be tight fitting with glass retained by stops with sealant or caulking all around.

> **Exception:** Openings that are required to be fire resistant.

1314.3 Building Assemblies Used as Ducts or Plenums: Building assemblies used as ducts or plenums shall be sealed, caulked, and gasketed to limit air leakage.

City of Redmond
2003 WSEC & VIAQ
Residential[0],[1] Prescriptive Compliance Form

If you have chosen to follow the prescriptive insulation and glazing requirements you will need to choose one of the five options below. This choice may depend on your glazing percentage (the total area of glass in the heated areas of the building divided by the total floor area of the heated space.)

Check the box in front of the option which you will use to meet the prescriptive requirements:

Choice	Option	Glazing Area[10]: % of Floor	Glazing U-Factor		Door[9] U-Factor	Ceiling[2]	Vaulted Ceiling[3]	Wall[12] Above Grade	Wall• int[4] Below Grade	Wall• ext[4] Below Grade	Floor[5]	Slab[6] on Grade
			Vertical	Overhead[11]								
	I.*	12%	0.35	0.58	0.20	R-38	R-30	R-15	R-15	R-10	R-30	R-10
	II.*	15%	0.40	0.58	0.20	R-38	R-30	R-21	R-21	R-10	R-30	R-10
	III.*	25% Group R-1 and R-2 Occupancies Only	0.40	0.58	0.20	R-38 / U = 0.031	R-30 / U = 0.034	R-21 / U = 0.060	R-15	R-10	R-30 / U = 0.029	R-10
	IV.	Unlimited Group R-3 and R-4 Occupancies Only	0.40	0.58	0.20	R-38	R-30	R-21	R-21	R-10	R-30	R-10
	V.	Unlimited Group R-1 and R-2 Occupancies Only	0.35	0.58	0.20	R-38 / U = 0.031	R-30 / U = 0.034	R-21 / U = 0.060	R-15	R-10	R-30 / U = 0.029	R-10

0. Nominal R-values are for wood frame assemblies only or assemblies built in accordance with Section 601.1.
1. Minimum requirements for each option listed. For example, if a proposed design has a glazing ratio to the conditioned floor area of 13%, it shall comply with all of the requirements of the 15% glazing option (or higher). Proposed designs which cannot meet the specific requirements of a listed option above may calculate compliance by Chapters 4 or 5 of this Code.
2. Requirement applies to all ceilings except single rafter or joist vaulted ceilings. 'Adv' denotes Advanced Framed Ceiling.
3. Requirement applicable only to single rafter or joist vaulted ceilings.
4. Below grade walls shall be insulated either on the exterior to a minimum level of R-10, or on the interior to the same level as walls above grade. Exterior insulation installed on below grade walls shall be a water resistant material, manufactured for its intended use, and installed according to the manufacturer's specifications. See Section 602.2.
5. Floors over crawl spaces or exposed to ambient air conditions.
6. Required slab perimeter insulation shall be a water resistant material, manufactured for its intended use, and installed according to manufacturer's specifications. See Section 602.4.
7. Int. denotes standard framing 16 inches on center with headers insulated with a minimum of R-10 insulation.
8. This wall insulation requirement denotes R-19 wall cavity insulation plus R-5 foam sheathing.
9. Doors, including all fire doors, shall be assigned default U-factors from Table 10-6C.
10. Where a maximum glazing area is listed, the total glazing area (combined vertical plus overhead) as a percent of gross conditioned floor area shall be less than or equal to that value. Overhead glazing with U-factor of U=0.40 or less is not included in glazing area limitations.
11. Overhead glazing shall have U-factors determined in accordance with NFRC 100 or as specified in Section 502.1.5.
12. Log and solid timber walls with a minimum average thickness of 3.5" are exempt from this insulation requirement.

*** If you selected option I, II or III you will need to complete the Glass to Floor Area Worksheet to show the glazing percentage does not exceed the option selected.**

GLAZING AREA: Glass to Floor Area Worksheet
(Required for Options I, II and III only.)

Glazing is defined as all areas, including the frames, in the shell of a conditioned space that let in natural light including windows, clerestories, skylights, sliding or swinging glass doors and glass block walls.

Glazing Area is defined as the total area of the glazing measured using the rough opening, and including the glazing, sash and frame. For doors where the daylight opening area is less than 50 percent of the door area, the glazing area is the daylight opening area. For all other doors, the glazing area is the door area.

Doors whose area and U-factor are included in the calculations for glazing area may be installed with a U-factor in accordance with the Glazing U-factor requirements instead of the door U-factor requirements.

Exempt Door: One unlabeled or untested exterior swinging door with the maximum area of 24 square feet may be installed for ornamental, security, or architectural purposes and need not be listed below.

Overhead glazing (skylights) with a U-factor of U- 0.40 or less need not be listed below.

Single glazing for ornamental, security, or architectural purposes and double glazed garden windows with a wood or vinyl frame may be exempted from the U-factor limitations, but if so, it shall have its area tripled in list below. The maximum area (before tripling) allowed for the total of all single glazing and garden windows in 1% of the floor area.

Step 1: List the rough opening size of all glazing areas as defined above and calculate their total area.

Width	X	Height	=	AREA (Each)	X	Quantity (# of each)	=	Total Area (in square feet)
Add the last column and enter total Glazing Area here →								**(a)**

Step 2:

Enter the square footage of Conditioned Floor Area (heated and/or cooled space) →	**(b)**

Step 3: Calculate the Glazing percentage by dividing the total Glazing Area by the Conditioned Floor Area and multiplying by one hundred:

Glazing Area (a)	/	**Conditioned Floor Area** (b)	=	_____	**X 100 =**	**Glazing Percentage**

In order to use option I, the glazing percentage cannot exceed 12%.

In order to use option II, the glazing percentage cannot exceed 15%.

In order to use option III, the glazing percentage cannot exceed 25%.

WHOLE HOUSE VENTILATION USING THE PRESCRIPTIVE METHOD

Purpose: We have all heard about office and school buildings which cause people to become ill. If improperly ventilated, our homes can cause some of us to become ill too. With all of the new materials we use to construct and furnish our buildings, it is very important that our homes are ventilated in such a way as to provide us with method to get the stale air out and fresh air in.

Please check the appropriate box to describe which of the four prescriptive Whole House Ventilation Systems you will be using, and fill in any blanks or boxes under the system you choose.

☐ **Option 1**. Whole house Ventilation Using Exhaust Fans (VIAQ 303.4.1)

- _____ CFM Exhaust Fan Flow Rating Per Table 3-2 (attached). Location of whole house exhaust fan(s) must be shown on the plans.
- Fan Controls: 24 hour clock timer with capability of continuous operation, manual and automatic control & accessible
- Whole house fans located 4 feet or less from the interior grille shall have a sone rating of 1.5 or less at 0.1 inches w.g.
- Outdoor Air shall be distributed to each habitable room by individual Outdoor Air inlets.

  Exception: Exhaust only ventilation systems do not require outdoor air inlets if the home has a ducted forced air heating system that communicates with all habitable rooms and the interior doors are undercut a minimum of ½ inch.

☐ **Option 2**. Whole house Ventilation Integrated with a Forced Air Heating System (VIAQ 303.4.2)

- _____ inch Fresh air duct, connected to the furnace return plenum, sized Per Table 3-5 (attached)
- Fresh Air inlet duct Damper Selection: **(Choose one)**
  - ☐ Motorized Damper (no testing of ventilation flow rates as long as the prescriptive duct sizing per Table 3-5 are met.
  - ☐ Manual Damper meeting Table 3-2 flow rates: _____CFM (see attached Table 3-2)
  - ☐ Automatic Flow-Regulated Device per VIAQ 030.4.2.1 #3. (Requires field testing or calculation.)
- Outdoor Air inlets shall be screened or otherwise protected from entry by leaves or other material and located per VIAQ 303.4.2.4
- All Ventilation supply ducts in the conditioned space shall be insulated to a minimum of R-4 (VIAQ 303.4.2.3)

☐ **Option 3**. Whole house Ventilation Using a Supply Fan (VIAQ 303.4.3)

- _____ inch Outdoor air inlet duct, connected to the furnace supply air stream, sized Per Table 3-6 (attached)
- Fresh Air inlet duct Back-draft Damper Selection: **(Choose one)**
  - ☐ Calibrated manual volume damper installed and set to meet the measured flow rates in Table 3-2 (attached) by field testing with a pressure gauge and/or following manufacturer's installation instructions.
  - ☐ A manual volume damper installed and set to meet the measured flow rates specified in Table 3-2 by field testing with a flow hood or flow measuring station.
  - ☐ An automatic flow-regulating device sized to the specified flow rate in Table 3-2 which provides constant flow over a pressure range of 0.20 to 0.60 inches water gauge.
- Outdoor Air inlets shall be screened or otherwise protected from entry by leaves or other material and located per VIAQ 303.4.3.6
- All Ventilation supply ducts in the conditioned space shall be insulated to a minimum of R-4 (VIAQ 303.4.3.5)

☐ **Option 4**. Whole house Ventilation Using a Heat Recovery Ventilation System (VIAQ 303.4.4)

- All duct work in heat recovery system shall be at least 6 inches in diameter
- Balancing dampers shall be installed on the inlet and exhaust side.
- Flow measurement grids shall be installed on the supply and return.
- System minimum flow rating shall not be less than specified in Table 3-2. Maximum rates in Table 3-2 do not apply.
- Outdoor air inlets shall be screened or otherwise protected from entry by leaves or other material and located per VIAQ 303.4.4.4
- Ventilation Supply Ducts in the conditioned space upstream of the heat exchanger shall be insulated to a minimum of R-4 (VIAQ 303.4.4.3)

→ **THE FOLLOWING ARE REQUIRED IN ADDITION TO THE OPTION CHOSEN ABOVE:**

- At the time of final inspection, the automatic control time shall be set to operate the whole house fan for at least 8 hours per day,
- A label shall be affixed to the control that reads **"Whole House Ventilation" (see operating instructions)**
- 24-hour clock timer installed with capability of continuous operation, manual and automatic control, readily accessible.
- Installer shall provide the manufacturer's installation, operating instructions, and a whole house ventilation system operation description.

REFERENCE TABLES

Table 3-2: Ventilation Rates for all Group R Occupancies four stories and less *

Minimum and Maximum Ventilation Rates: Cubic Feet per Minute (CFM)

Floor Area, ft^2	Number of Bedrooms													
	2 or less		3		4		5		6		7		8	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
< 500	50	75	65	98	80	120	95	143	110	165	125	188	140	210
501-1000	55	83	70	105	85	128	100	150	115	173	130	195	145	218
1001-1500	60	90	75	113	90	135	105	158	120	180	135	203	150	225
1501-2000	65	98	80	120	95	143	110	165	125	188	140	210	155	233
2001-2500	70	105	85	128	100	150	115	173	130	195	145	218	160	240
2501-3000	75	113	90	135	105	158	120	180	135	203	150	225	165	248
3001-3500	80	120	95	143	110	165	125	188	140	210	155	233	170	255
3501-4000	85	128	100	150	115	173	130	195	145	218	160	240	175	263
4001-5000	95	143	110	165	125	188	140	210	155	233	170	255	185	278
5001-6000	105	158	120	180	135	203	150	225	165	248	180	270	195	293
6001-7000	115	173	130	195	145	218	160	240	175	263	190	285	205	308
7001-8000	125	188	140	210	155	133	170	255	185	278	200	300	215	323
8001-9000	135	203	150	225	165	248	180	270	195	293	210	315	225	338
> 9000	145	218	160	240	175	263	190	285	205	308	220	330	235	353

- For residences that exceed 8 bedrooms, increase the minimum requirement listed for 8 bedrooms by an additional 15 CFM per bedroom. The maximum CFM is equal to 1.5 times the minimum

Table 3-3: Prescriptive Exhaust Duct Sizing

Fan Tested CFM @ 0.25″ W.G	Minimum Flex Diameter	Maximum Length (feet)	Minimum Smooth Diameter	Maximum Length Feet	Maximum Elbows [1]
50	4 inch	25	4 inch	70	3
50	5 inch	90	5 inch	100	3
50	6 inch	No Limit	6 inch	No Limit	3
80	4 inch[2]	N.A.	4 inch	20	3
80	5 inch	15	5 inch	100	3
80	6 inch	90	6 inch	No Limit	3
100	5 inch[2]	N.A.	5 inch	50	3
100	6 inch	15	6 inch	No Limit	3
125	6 inch	15	6 inch	No Limit	3
125	7 inch	70	7 inch	No Limit	3

1. For each additional elbow subtract 10 feet from maximum length
2. Flex ducts of this diameter are not permitted with fans of this size.

Table 3-5: Prescriptive Integrated Forced Air Supply Duct Sizing

Required Flow (CFM) Per Table 3-2	Minimum Smooth Duct Diameter	Minimum Flexible Duct Diameter	Maximum Length[1]	Maximum Number of Elbows[2]
50-80	6″	7″	20′	3
80-125	7″	8″	20′	3
115-175	8″	10″	20′	3
170-240	9″	11″	20′	3

1. For lengths over 20 feet increase duct diameter 1 inch
2. For elbows numbering more than 3 increase duct diameter 1 inch.

Table 3-6: Prescriptive Supply Fan Duct Sizing

Supply Fan Tested at 0.40″ W.G.		
Specified Volume from Table 3-2	Minimum Smooth Duct Diameter	Minimum Flexible Duct Diameter
50 – 90 CFM	4 inch	5 inch
90 - 150 CFM	5 inch	6 inch
150 – 250 CFM	6 inch	7 inch
250 – 400 CFM	7 inch	8 inch

SOURCE SPECIFIC VENTILATION (VIAQ 302.2)

Source specific exhaust ventilation is required in each kitchen, bathroom, water closet, laundry room, indoor swimming pool, spa, and other rooms where excess water vapor or cooking odor is produced. Source specific ventilation systems must be controlled by a manual switch, de-humidistat, timer or other approved means. Controls must be readily accessible. Ducts must terminate outside the building. Exhaust ducts which are designed to operate intermittently must be equipped with back-draft damper. All exhaust ducts in unconditioned spaces must be insulated to a minimum of R-4. Terminal elements must have at least the equivalent net free area of the duct work. Terminal elements for exhaust fan duct systems must be screened or otherwise protected from entry by leaves or other material.

Table 3-1: Minimum Source Specific Ventilation Capacity Requirements

	Bathrooms	Kitchens
Intermittently operating	50 cfm	100 cfm
Continuous operation	20 cfm	25 cfm

Please be sure to note the locations of your source specific fans on your construction drawings and include the cfm rating you plan to install.

MOISTURE CONTROL (WSEC 502.1.6)

In order to help prevent moisture from collecting within the framing of the building, a vapor retarder must be installed to minimize vapor movement through what is called the diffusion process. Components of the house requiring a vapor retarder are:

- Floors between heated and unheated spaces.
- Walls – on the inside (warm side in winter)
- Ceilings averaging less than 12 inches of ventilated area above the insulation to the underside of the roof sheathing.

Check the appropriate boxes to indicate which method of interior vapor retarder will be used to meet Moisture Control requirements:

LOCATION	MATERIAL				
	Exterior Grade Plywood or OSB	Backed Batts [1]	4 – Mil Clear Plastic [2]	Vapor Retarder Paint (1.0 perm rating)	Not required if ventilation space average 12" above insulation
Floors		N/A	N/A		N/A
Walls	N/A				N/A
Ceilings	N/A				

1 Backed batts at walls and ceilings must be faced stapled. (Paper should extend over studs or rafters towards interior heated space)

2 Plastic is to be applied on the interior face of studs, ceiling joists, and rafters. (This does not replace the requirement for 6-mil black polyethylene (plastic) to be laid over the ground within crawl spaces.

PRESCRIPTIVE HEATING SYSTEM SIZING

Heating and cooling design loads for the purpose of sizing HVAC systems are required and calculations in accordance with accepted engineering practice, including infiltration and ventilation must be provided when plans are submitted for the building permit.

EXCEPTION: Design heat load calculations are not required to be submitted if the heating system installed is equal to or less than 20 Btu/h*ft^2.

If you plan to use this exception please complete the following calculation.

Heated floor area _____ x 20 = _____ Btu/h*ft^2 (maximum heating appliance rating)

Please note that if the heating equipment you actually install exceeds the value calculated in this table, the building inspector may require that you provide design head load calculations prior to field approval.

For more information on the WSEC or VIAQ visit: http://www.energy.wsu.edu/code/code_support_2003.cfm

FIRE PREVENTION
OCCUPANT'S STATEMENT OF INTENDED USE

(NOT REQUIRED FOR EXPEDITED BUILDING PERMITS)

Development #_____ Project #_____ Permit #_____

Project Name / Tenant _____

Site Address_____ Bldg/Unit/Suite _____

UBC Construction Type _____UBC Occupancy Type_____

Description of Use_____

Building Square Footage_____ Area of Construction_____

Will there be any installation, modification or removal of the following? (Check all that apply.)

- ❑ Automatic fire extinguishing systems
- ❑ Compressed gas systems
- ❑ Fire alarm and detection systems
- ❑ Fire pumps
- ❑ Flammable and combustible liquids (tanks, piping ect…)
- ❑ Hazardous materials
- ❑ High piled / rack storage
- ❑ Industrial ovens / furnace
- ❑ Private fire hydrants
- ❑ Spraying or dipping operations
- ❑ Standpipe systems
- ❑ Temporary membrane structures, tents (>200 sq. ft.) or canopies (>400 sq. ft.)

Provide details on any of the above checked items:

_____
_____
_____
_____

Installation, changes, modifications or removal of any of the above may require additional submittals, information, or permits during the plan review or construction process.

_____
Printed Name of Occupant/Agent

_____ _____
Signature of Occupant/Agent Date

~ Location Address: 15670 NE 85th St. ~ Mailing Address: P.O. Box 97010 ~ Redmond, WA 98073-9710 ~
~ Inspection Requests: (425) 556-2232 ~ Inspection Fax: (425) 556-2272 ~
~ Plan Review General Phone: (425) 556-2246 ~ Plan Review Fax: (425) 556-2272 ~
~ General Email: fpdiv@ci.redmond.wa.us ~

CITY OF REDMOND
Permit Center
15670 NE 85th Street
Redmond, WA 98052
(425) 556-2473
www.redmond.gov

FOR STAFF USE ONLY	
Development #:	**Date:**
Project #:	**App Expires:**
Permit:	**Accepted by:**
Type:	**Payment method:**

Commercial/Multi-Family Permit Application

Application and plans must be complete in order to be accepted for plan review.

Project Name/Tenant:		***Value of Construction:**
Site Address:		**Tax Parcel Number:**
General Location:		Bldg, Unit, Suite Designation:
Contact Person:		Phone:
Mailing Address:	City State/Zip:	Fax #:
Firm or Company Name:		E-Mail Address:
Contractor:		Phone:
Mailing Address:	City State/Zip:	Fax #:
State Contractor's License #:	Expiration Date:	City of Redmond Business License #:
Design Professional:		Phone:
Mailing Address:	City State/Zip:	Fax #:
Firm or Company Name:		E-Mail Address:
Property Owner:		Phone:
Mailing Address:	City State/Zip:	Fax #:
Lender Name:		Phone:
Mailing Address:	City State/Zip:	Fax #:

Description of work to be done (Please be specific):_____

_____

_____

_____

_____

Construction Type of Building 2003 IBC:

❒ Type I A ❒ Type II A ❒ Type III A ❒ Type IV ❒ Type V A ❒ Other _____

❒ Type I B ❒ Type II B ❒ Type III B ❒ Type V B

Use or Occupancy Type(s):_____

Number of New Dwelling Units:

_____

Total Area of Construction (Sq. Ft.):_____

Building Square Footage (new): _____ **(existing):**_____ **(total):**_____

Number of Stories (new):_____ **(existing):** _____ **(total):**_____

IBC Sprinkler Substitutions:

❒ Area Increase ❒ Story Increase ❒ One-Hour Construction
❒ Unlimited Area ❒ Height Increase ❒ Other _____

Will there be a Change of Building Code Use? ❒ Yes ❒ No

If Yes, State Existing Use(s):_____ **Proposed Use(s):** _____

Type of Work:

❒ New Commercial Building ❒ Commercial Addition ❒ Tenant Improvement ❒ Rack Storage ❒ Other _____
❒ New Multi-Family Building ❒ Multi-Family Addition ❒ Multi-Family Alteration ❒ Reroofing

Planning Department Information: (If Yes - Describe Below)

1. Exterior Modifications to Building? ❒ Yes
2. Change of Land Use? (RCDG) ❒ Yes
3. Sensitive Areas On or Near Site? ❒ Yes
4. Is Permit a PRD / MPRD / PCD / MPCD? ❒ Yes
5. Building Generates Noise Above 35 dBA? ❒ Yes
6. Tree Removal Proposed? ❒ Yes
7. Mechanical Equipment Proposed? ❒ Yes
8. Additional Building Square Footage Proposed? ❒ Yes
9. Change in Number of Existing Parking Stalls? ❒ Yes
10. Reducing Landscaping Square Footage Proposed? ❒ Yes
11. Reroofing ❒ Yes

Item # & Description:_____

_____

_____

Fire Department Information: (If Yes - Describe Below)

1. Automatic Sprinkler System? ❒ Yes
2. Automatic Fire Alarm System? ❒ Yes
3. Standpipe System? ❒ Yes
4. Other Fire Protection System? ❒ Yes
5. High Pile or Rack Storage? ❒ Yes (Provide Rack LF_____ & Rack Height _____)
6. UPS or Storage Battery System? ❒ Yes
7. Flammable/Combustible Materials in Building? ❒ Yes
8. Hazardous Materials in Building? ❒ Yes
9. Hazardous Materials Management Plan Required? ❒ Yes

Item # & Description:_____

_____

_____

Notes:
#6 - Provide information on the quantity of battery electrolyte (if quantity equals or exceeds 100 gallons **UFC Article 64** shall apply).
#7 & 8 - If flammable/combustible or hazardous materials are used or stored in the building, provide a **Hazardous Materials Management Inventory and a Hazardous Materials Management Plan** *(Provide copies of all Material Safety Data Sheets)*

***Value of Construction –** The value of construction shall include the prevailing fair market value of all labor, materials and equipment, whether actually paid or not, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems, automatic sprinkler systems, other mechanical systems and other permanent work or permanent equipment, not including furnishings. The Building Official shall make the final determination of the value of construction as specified in Section 108.3 of the International Building Code.

Expiration of Plan Review - Applications for which no permit is issued within 180 days following the date of application shall expire and all fees paid shall be forfeited. Upon written request of the applicant, the Building Official may grant a 90-day extension to the Plan Review time as specified in Section 105.3.2 of the International Building Code. No application shall be extended for a period of more than 90 days.

Building Owner or Authorized Agent:

Signature:_____ ***Print Name:***_____ ***Date:***_____

Please visit our web site at: **http://www.redmond.gov/insidecityhall/planning/planning.asp**

THE CITY OF REDMOND
Commercial/Multi-Family
Building Permit Fee Calculation Worksheet

This form must be completed for all Commercial and Multi-Family projects that involve new construction or an increase in square footage to correctly calculate the fees. Please note that a separate permit is required for **each building or structure** that is part of the project. **Complete one worksheet for each permit.**

PROJECT NAME: _____ **DATE:** _____

PROJECT ADDRESS: _____

NUMBER OF DWELLING UNITS: _____ **NUMBER OF STORIES:** _____

FIRE SPRINKLER SYSTEM: ❒ **YES** ❒ **NO**

1) **Determining Building Valuation:** The final determination of building valuation shall be made by the Building Official.

   a) **For New Construction or Increases in Square Footage:** The value used in computing fees, based on UBC Table 1-A adopted by Resolution No. 1189, is determined on the basis of the valuation per square foot using the Building Valuation Data. Determination of the project square footage is based on gross area, defined below.

2) **Gross Area:** The gross area, used in conjunction with the Building Valuation Data and other data to determine the valuation of a building project, means the total area of all floors, measured from the exterior face, outside dimensions or exterior column line of a building, including basements, cellars and balconies, but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides, for the purpose of calculating gross area, will be the edge of the roof, including gutters.

The City of Redmond uses the **"Good"** classification for residential construction in conjunction with the Building Valuation Data and **does not use any "Regional Modifiers"**. The information that you provide will be verified during the plan review process.

OCCUPANCY	AREA IN SQUARE FEET	UBC CONSTRUCTION TYPE	AIR CONDITIONING
APARTMENT HOUSES* Type V ❒ Masonry ❒ Wood ❒ Type 1FR Basement Garage			❒ YES ❒ NO Basement Garage ❒ YES ❒ NO
AUDITORIUMS			❒ YES ❒ NO
BANKS			❒ YES ❒ NO
BOWLING ALLEYS			❒ YES ❒ NO
CHURCHES			❒ YES ❒ NO

* This occupancy is used for all residential multi-family projects.

OCCUPANCY	AREA IN SQUARE FEET	UBC CONSTRUCTION TYPE	AIR CONDITIONING
CONVALESCENT HOSPITALS			❒ YES ❒ NO
FIRE STATIONS			❒ YES ❒ NO
HOMES FOR THE ELDERLY			❒ YES ❒ NO
HOSPITALS			❒ YES ❒ NO
HOTELS AND MOTELS			❒ YES ❒ NO
INDUSTRIAL PLANTS			❒ YES ❒ NO
JAILS			❒ YES ❒ NO
LIBRARIES			❒ YES ❒ NO
MEDICAL OFFICES			❒ YES ❒ NO
OFFICES			❒ YES ❒ NO
PUBLIC BUILDINGS			❒ YES ❒ NO
PUBLIC GARAGES*			❒ YES ❒ NO
RESTAURANTS			❒ YES ❒ NO
SCHOOLS			❒ YES ❒ NO
SERVICE STATIONS			❒ YES ❒ NO
STORES			❒ YES ❒ NO
THEATERS			❒ YES ❒ NO
WAREHOUSES			❒ YES ❒ NO

* Use the Public Garage category for Types S-2 Private Garages that are part of commercial projects.

MISCELLANEOUS OCCUPANCIES	AREA IN SQUARE FEET	UBC CONSTRUCTION TYPE	FIRE SPRINKLER SYSTEM
BULKHEADS			❒ YES ❒ NO
DECKS			❒ YES ❒ NO
DOCKS			❒ YES ❒ NO
SHEDS OVER 120 SQUARE FEET			❒ YES ❒ NO

PLEASE NOTE:
The information provided on this form will be used by our Permit Tracking system to calculate the total Building Permit fees. The Building Permit fees determined with this information **do not** include any impact fees that may be assessed. It also does not include the fees for any other construction permits that may be needed for your project. These other permits include, but are not limited to, electrical, mechanical, plumbing, fire alarm, fire sprinkler or sign permits.

COMMERCIAL & MULTI-FAMILY BUILDING PERMIT FEES EFFECTIVE JULY 1, 2004

UBC TABLE 1-A[1]	
TOTAL VALUATION	**FEE**
$1.00 to $500.00	$23.50
$501.00 to $2,000.00	$23.50 for the first $500.00 plus $3.05 for each additional $100.00, or fraction thereof, to and including $2,000.00
$2,001.00 to $25,000.00	$69.25 for the first $2,000.00 plus $14.00 for each additional $1,000.00, or fraction thereof, to and including $25,000.00
$25,001.00 to $50,000.00	$391.25 for the first $25,000.00 plus $10.10 for each additional $1,000.00, or fraction thereof, to and including $50,000.00
$50,001.00 to $100,000.00	$643.75 for the first $50,000.00 plus $7.00 for each additional $1,000.00, or fraction thereof, to and including $100,000.00
$100,001.00 to $500,000.00	$993.75 for the first $100,000.00 plus $5.60 for each additional $1,000.00, or fraction thereof, to and including $500,000.00
$500,001.00 to $1,000,000.00	$3,233.75 for the first $500,000.00 plus $4.75 for each additional $1,000.00, or fraction thereof, to and including $1,000,000.00
$1,000,000.00 and up	$5608.75 for the first $1,000,000.00 plus $3.65 for each additional $1,000.00, or fraction thereof

1) **Determining Building Valuation:** The final determination of building valuation shall be made by the Building Official.

   a) **For New Construction or Increases in Square Footage:** The value used in computing fees, based on UBC Table 1-A adopted by Resolution No. 1189, is determined on the basis of the valuation per square foot using the Building Valuation Data. Determination of the project square footage is based on gross area, defined below.

   b) **For Remodel, Alteration or Tenant Improvement:** The value used in computing fees, based on UBC Table 1-A, is determined on the basis of the estimated current value of all labor and materials, whether actually paid or not, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems, automatic sprinkler systems, other mechanical systems and other permanent work or permanent equipment but not including furnishings.

2) **Gross Area:** The gross area, used in conjunction with the Building Valuation Data and other data to determine the valuation of a building project, means the total area of all floors, measured from the exterior face, outside dimensions or exterior column line of a building, including basements, cellars and balconies, but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides, for the purpose of calculating gross area, will be the edge of the roof, including gutters.

[1] UBC Table 1-A is part of the *Uniform Building Code*™ Copyright 1997 Published by the International Conference of Building Officials. Adopted by Resolution No. 1189 - Effective July 1, 2004

3) **Plan Check Fee Deposit:** The Building, Energy, Engineering and Fire Department Plan Check fees are due in full at the time of application and are non-refundable.

4) **Electrical, Mechanical and Plumbing Permits:** Electrical, Mechanical and Plumbing permits are issued separately from the building permit. For information on these permits, see the individual applications and fee schedules.

#	ITEM	FEE
1	Building Permit Fee*	100% of UBC Table 1-A
2	Building Plan Check Fee*	An Additional 65% of UBC Table 1-A
3	Energy Plan Check Fee*	See Table Below
4	Fire Department Plan Check Fee*	See Table Below
5	Engineering Plan Check Fee* (New Construction or Additions Only)	An Additional 120% of UBC Table 1-A
6	State Building Code Fee	$4.50 per Permit plus an additional $2.00 for each multifamily dwelling unit after the first unit.
7	Capital Facilities Charge (New Construction or Additions Only)	DETERMINED BY PUBLIC WORKS STORMWATER DIVISION
8	Impact Fees (New Construction, Additions or Change of Use Only)	FIRE, PARKS, TRANSPORTATION AND KING COUNTY Each Organization, specific to the project, calculates fees.

ENERGY CODE PLAN CHECK FEE	
NEW CONSTRUCTION:	**FEE**
New Commercial Building	$112.29*
New Multi-Family Building	$112.29* **PLUS** $22.46* for each additional unit
TENANT IMPROVEMENT:	
No Energy Code Change	$16.84*
0 to 1,500 square feet	$33.69*
1,501 to 3,000 square feet	$67.37*
3,001 to 10,000 square feet	$134.75*
10,001 to 25,000 square feet	$202.12*
25,001 square feet and over	$336.87*

***A 3% Technology Surcharge is applied as authorized by City Ordinance # 2090, and extended by Resolution # 1162 on December 3, 2002.**

FIRE DEPARTMENT PLAN CHECK FEE	
VALUATION BASED ON UBC TABLE 1-A	**FEE**
$0 to $1,000	$47.44*
$1,001 to $5,000	$107.52*
$5,001 to $10,000	$154.96*
$10,001 to $20,000	$190.89*
$20,001 to $45,000	$237.21*
$45,001 to $100,000	$285.78*
$100,001 to $250,000	$405.09*
$250,001 to $500,000	$487.34*
$500,001 to $1,000,000	$607.77*
$1,000,001 to $1,500,000	$689.75*
$1,500,001 to $2,000,000	$737.47*
$2,000,000 and up	$737.47* for the first $2,000.000 plus $60.08* for each additional $500,000 or fraction thereof over $2,000,000

OTHER INSPECTIONS AND FEES	
Inspections outside of normal business hours (minimum charge-two hours)	$119.03 per hour
Reinspection fees	$104.15 per assessment
Inspections for which no fee is specifically indicated (minimum charge-two hours)	$104.15 per hour
Additional plan review required by changes, additions or revisions to plans (minimum charge-two hours)	$104.15 per hour*
Additional plan review required by Deferred Submittals (minimum charge-two hours)	$104.15 per hour*
For use of outside consultants for plan checking* and inspections, or both	Actual costs[2]

***A 3% Technology Surcharge is applied as authorized by City Ordinance # 2090, and extended by Resolution # 1162 on December 3, 2002.**

EFFECTIVE JULY 1, 2004

[2] Actual costs include administrative and overhead costs.

BUILDING VALUATION DATA

The following building valuation data representing **average costs** for most buildings. This valuation information is based on *Building Standards*™ published by the International Conference of Building Officials with a ten percent adjustment. Actual costs in Redmond are higher than ICBO's estimate, and are increasing. Residential buildings in Redmond are considered "good" construction.

The unit costs are intended to comply with the definition of "valuation" in Section 223 of the 1997 *Uniform Building Code*™ and thus include architectural, structural, electrical, plumbing and mechanical work, except as specifically listed below. The unit costs also include the contractor's profit, which should not be omitted.

EFFECTIVE JANUARY 1, 2004

Occupancy and Type	Cost per Square Foot, Average
1. APARTMENT HOUSES:	
Type I or II FR*	$97.60
(Good)	$120.10
Type V-Masonry (or Type III)	$79.60
(Good)	$97.60
Type V-Wood Frame	$73.70
(Good)	$94.70
Type I-Basement Garage	$41.10
2. AUDITORIUMS:	
Type I or II FR	$115.30
Type II-1Hour	$83.50
Type II-N	$79.00
Type III-1Hour	$87.80
Type III-N	$83.30
Type V-1 Hour	$83.90
Type V-N	$78.30
3. BANKS:	
Type I or II FR	$162.90
Type II-1Hour	$120.00
Type II-N	$116.20
Type III-1Hour	$132.40
Type III-N	$127.70
Type V-1 Hour	$120.00
Type V-N	$115.00
4. BOWLING ALLEYS:	
Type II-1Hour	$56.10
Type II-N	$52.40
Type III-1Hour	$61.10
Type III-N	$57.10
Type V-1 Hour	$41.10
5. CHURCHES:	
Type I or II FR	$109.10
Type II-1Hour	$82.00
Type II-N	$77.90
Type III-1Hour	$89.10
Type III-N	$85.10
Type V-1 Hour	$83.30
Type V-N	$78.30
6. CONVALESCENT HOSPITALS:	
Type I or II FR*	$153.10
Type II-1Hour	$106.20
Type III-1Hour	$108.90
Type V-1 Hour	$102.60

Occupancy and Type	Cost per Square Foot, Average
7. DWELLINGS:	
Type V-Masonry	$83.30
(Good)	$106.60
Type V-Wood Frame	$74.00
(Good)	$101.60
Basements-	
Semi-Finished	$22.10
(Good)	$25.50
Unfinished	$16.10
(Good)	$19.40
8. FIRE STATIONS:	
Type I or II FR	$125.80
Type II-1Hour	$82.80
Type II-N	$78.10
Type III-1Hour	$90.60
Type III-N	$86.80
Type V-1 Hour	$85.00
Type V-N	$80.60
9. HOMES FOR THE ELDERLY:	
Type I or II FR	$114.10
Type II-1Hour	$92.60
Type II-N	$88.70
Type III-1Hour	$96.50
Type III-N	$92.50
Type V-1 Hour	$93.20
Type V-N	$90.00
10. HOSPITALS:	
Type I or II FR*	$179.50
Type III-1Hour	$148.60
Type V-1 Hour	$141.80
11. HOTELS AND MOTELS:	
Type I or II FR*	$111.10
Type III-1Hour	$96.30
Type III-N	$91.70
Type V-1 Hour	$83.80
Type V-N	$82.20
12. INDUSTRIAL PLANTS:	
Type I or II FR	$62.60
Type II-1Hour	$43.30
Type II-N	$40.00
Type III-1Hour	$48.00
Type III-N	$45.20
Tilt-up	$33.00
Type V-1 Hour	$45.20
Type V-N	$41.40

Occupancy and Type	Cost per Square Foot, Average
13. JAILS:	
Type I or II FR	$175.00
Type III-1Hour	$160.10
Type V-1 Hour	$120.00
14. LIBRARIES:	
Type I or II FR	$128.00
Type II-1Hour	$93.70
Type II-N	$89.10
Type III-1Hour	$99.00
Type III-N	$94.10
Type V-1 Hour	$93.00
Type V-N	$89.10
15. MEDICAL OFFICES:	
Type I or II FR*	$131.50
Type II-1Hour	$101.40
Type II-N	$96.40
Type III-1Hour	$110.00
Type III-N	$102.40
Type V-1 Hour	$99.20
Type V-N	$95.70
16. OFFICES:**	
Type I or II FR*	$117.50
Type II-1Hour	$78.70
Type II-N	$75.00
Type III-1Hour	$85.00
Type III-N	$81.20
Type V-1 Hour	$79.50
Type V-N	$75.00
17. PRIVATE GARAGES:	
Wood Frame	$26.70
Masonry	$30.10
Open Carport	$18.20
18. PUBLIC BUILDINGS:	
Type I or II FR*	$135.70
Type II-1Hour	$110.00
Type II-N	$105.60
Type III-1Hour	$114.10
Type III-N	$110.20
Type V-1 Hour	$104.50
Type V-N	$100.80
19. PUBLIC GARAGES:	
Type I or II FR*	$53.80
Type I or II Open Parking*	$40.40
Type II-N	$40.70
Type III-N	$36.20
Type V-1 Hour	$37.10

Occupancy and Type	Cost per Square Foot, Average
20. RESTAURANTS:	
Type III-1Hour	$107.30
Type III-N	$103.50
Type V-1 Hour	$98.10
Type V-N	$94.30
21. SCHOOLS:	
Type I or II FR	$122.30
Type II-1Hour	$83.50
Type III-1Hour	$89.30
Type III-N	$85.90
Type V-1 Hour	$83.70
Type V-N	$79.90
22. SERVICE STATIONS:	
Type II-N	$73.90
Type III-1Hour	$77.10
Type V-N	$65.70
Canopies	$30.80
23. STORES:	
Type I or II FR*	$90.60
Type II-1Hour	$55.40
Type II-N	$54.20
Type III-1Hour	$67.40
Type III-N	$63.30
Type V-1 Hour	$56.80
Type V-N	$52.50
24. THEATERS:	
Type I or II FR	$120.80
Type III-1Hour	$88.00
Type III-N	$83.80
Type V-1 Hour	$82.80
Type V-N	$78.30
25. WAREHOUSES*:**	
Type I or II FR	$54.30
Type II or V-1 Hour	$32.20
Type II or V-N	$30.30
Type III-1Hour	$36.50
Type III-N	$34.80
EQUIPMENT	
AIR CONDITIONING:	
Commercial	$4.60
Residential	$3.90
SPRINKLER SYSTEMS	$2.90

*Add 0.5 percent to total cost for each story over three. **Deduct 20 percent for shell-only buildings. ***Deduct 11 percent for mini-warehouses.

THE CITY OF REDMOND DOES NOT USE ANY REGIONAL MODIFIERS.